

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Vishnu K. Agarwal                      Attorney Docket No.: 501082.18  
Filed : Concurrently herewith  
Title : DEVICE AND METHOD FOR PROTECTING AGAINST OXIDATION OF A  
CONDUCTIVE LAYER IN SAID DEVICE

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-1449. This application relies, under 35 U.S.C. § 120, on the earlier filing dates of prior Application No. 09/652,994, filed August 31, 2000, which is a divisional of Application No. 09/200,253, filed November 25, 1998, and issuing as U.S. Patent No. 6,303,972. The references listed on the attached Form PTO-1449 were submitted to and/or cited by the Patent and Trademark Office in these prior applications and, therefore, are not required to be provided in this application. If the Examiner wishes, copies will be provided upon request. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicant's duty to disclose all information he is aware of which is believed relevant to the examination of the above-identified application, applicant believes that his invention is patentable.

Applicant also wishes to make known to the Patent and Trademark Office that applications, Serial Nos. 09/652,841, 09/652,993, 09/652,840, 09/652,842, 09/652,714, 09/654,027, 09/652,968, 09/652,579 and 09/652,580, describing and claiming subject matter that is similar to the subject matter of this application, were filed on August 31, 2000 in each instance. These related applications, which are divisional applications of above-referenced Application No. 09/200,253, filed November 25, 1998, issued October 16, 2001 as Patent No. 6,303,972, as well as any prior art cited therein, may be material to the examination of this

application. The specification, claims, abstract and drawings of these related applications as filed are identical to those currently on file in the instant application as filed; therefore duplicate copies are not submitted herewith.

Applicant also wishes to make known to the Patent and Trademark Office that application, Serial No. 09/981,764 describing and claiming subject matter that is similar to the subject matter of this application, was filed on October 16, 2001. This related application, which is a continuation application of above-referenced Application No. 09/200,253, filed November 25, 1998, issued October 16, 2001 as Patent No. 6,303,972, as well as any prior art cited therein, may be material to the examination of this application. The specification, claims, abstract and drawings of this related application as filed are identical to those currently on file in the instant application as filed, therefore a duplicate copy is not submitted herewith.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

DORSEY & WHITNEY LLP



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Enclosure:  
Form PTO-1449

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FORM PTO-1449 (REV.7-80)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. <b>501082.18</b>	APPLICATION NO. <b>not yet assigned</b>
<b>INFORMATION DISCLOSURE STATEMENT</b> <i>(Use several sheets if necessary)</i>		APPLICANT(S) <b>Vishnu K. Agarwal</b>	
		FILING DATE <b>concurrently herewith</b>	GROUP ART UNIT <b>not yet assigned</b>

### U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	3,649,886	03/14/72	Kooi	257	638	
	AB	4,013,485	03/22/77	Ma et al.	148	1.5	
	AC	4,717,602	01/05/88	Yamazaki	427	583	
	AD	4,814,842	03/21/89	Nakagawa et al.	357	23.7	
	AE	4,823,182	04/18/89	Okumura	357	67	
	AF	5,232,871	08/03/93	Ho	438	653	
	AG	5,332,444	07/26/94	George et al.	134	1	
	AH	5,376,593	12/27/94	Sandhu et al.	437	242	
	AI	5,438,012	08/01/95	Kamiyama	437	60	
	AJ	5,440,174	08/08/95	Nishitsuji	257	770	
	AK	5,552,339	09/03/96	Hsieh	437	190	
	AL	5,552,341	09/03/96	Lee	437	192	
	AM	5,622,888	04/22/97	Sekine et al.	438	398	
	AN	5,670,808	09/23/97	Nishihori et al.	257	310	
	AO	5,700,710	12/23/97	Zenke	437	60	
	AP	5,719,410	02/17/98	Suehiro et al.	257	77	
	AQ	5,723,384	03/03/09	Park et al.	438	756	
	AR	5,726,083	03/10/98	Takaishi	438	210	
	AS	5,733,816	03/31/98	Iyer et al.	438	592	
	AT	5,843,843	12/01/98	Lee et al.	438	688	
	AU	5,846,859	12/08/98	Lee	438	253	
	AV	5,852,307	12/22/98	Aoyama et al.	257	295	
	AW	5,853,500	12/29/98	Joshi et al.	148	247	
	AX	5,861,675	01/19/99	Sasaki et al.	257	764	
	AY	5,913,145	06/15/99	Lu et al.	438	643	

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AZ	5,955,758	09/21/99	Sandhu et al.	257	306	
	BA	5,956,594	09/21/99	Yang et al.	438	396	
	BB	5,970,384	10/19/99	Yamazaki et al.	438	795	
	BC	5,994,183	11/30/99	Huang et al.	438	256	
	BD	6,017,818	01/25/00	Lu	438	653	
	BE	6,077,742	06/20/00	Chen et al.	438	255	
	BF	6,087,257	07/11/00	Park et al.	438	675	
	BG	6,100,187	08/08/00	Hintermaier et al.	438	653	
	BH	6,100,193	08/08/00	Suehiro et al.	438	685	
	BI	6,107,152	08/22/00	Derderian	438	381	
	BJ	6,136,690	10/24/00	Li	438	627	
	BK	6,153,519	11/28/00	Jain et al.	438	681	
	BL	6,162,715	12/19/00	Mak et al.	438	592	
	BM	6,165,802	12/26/00	Cuchiaro et al.	438	3	
	BN	6,190,837 B1	02/20/01	Jung et al.	430	315	
	BO	6,201,276 B1	03/13/01	Agarwal et al.	257	315	
	BP	6,204,203	03/20/01	Narwankar et al.	438	785	
	BQ	6,245,662	06/12/01	Naik et al.	438	622	
	BR	6,255,688 B1	07/03/01	Lee et al.	257	311	
	BS	6,281,542 B1	08/28/01	Wu	257	308	
	BT	6,303,510 B1	10/16/01	Chien et al.	438	710	
	BU	6,303,972	10/16/01	Agarwal	257	532	
	BV	6,309,713 B1	10/30/01	Mak et al.	427	569	
	BW	6,320,213 B1	11/20/01	Kirlin et al.	257	295	
	BX	6,331,380 B1	12/18/01	Ye et al.	430	318	

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	BY	6,355,512 B1	03/12/02	Yamazaki et al.	438	158	
	BZ	6,372,633 B1	04/16/02	Maydan et al.	438	637	
	CA	6,383,951 B1	05/07/02	Li	438	781	
	CB	6,468,854 B1	10/11/02	Agarwal	438	238	
	CC	6,472,264 B1	10/29/02	Agarwal	438	238	
	CD	6,479,340 B1	11/12/02	Agarwal	438	238	
	CE	6,489,194 B1	12/03/02	Agarwal	438	238	
	CF	6,607,975 B1	08/19/03	Agarwal	438	622	
	CG	2001/0001501 A1	05/24/01	Lee et al.	257	534	
	CH	2002/0187633 A1	12/12/02	Akram	438	652	

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	CI	355011329 A	01/26/80	JP (Abstract only)			X	
	CJ	410070091 A	03/10/98	JP (Abstract only)			X	

### OTHER PRIOR ART *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	CK	Anonymous, "Oxide-Free Dielectric/GaAs Interface With No Excess As", IBM Technical Disclosure Bulletin, Vol. 33, No. 11, April 1, 1991, p. 352.
	CL	Schulz, S.E. et al., "Influence of Water Preclean Before Selective Tungsten CVD on Surface Properties of Interconnect and Intermetal Dielectric Materials", Physica Status Solidi A, Vol. 145, No. 2, October 16, 1994, pp. 311-318.

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